

REMARKS

Applicants respectfully request entry of the amendments and remarks submitted herein. Claim 26 has been amended to incorporate the limitation of claim 33, and claim 33 has accordingly been canceled.

Claims 26-29, 31, 32 and 34-59 are currently pending. Reconsideration of the pending application is respectfully requested.

The 35 U.S.C. §103 Rejections

Claims 26-29, 31 and 34-59 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chandra et al. (US Publication No. 2003/0176827) in view of Flick (U.S. Patent No. 6,087,549) and Madsen (US Publication No. 2002/0045049); and claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Chandra et al in view of Flick and Madsen and in further view of Becker et al. (US Patent No. 7,005,556). According to the Examiner, Chandra et al. discloses a wound dressing comprising a vapor permeable, liquid impermeable backing having an antimicrobial metal-containing absorbent and an adhesive thereon for adhering the dressing to the skin. The Examiner asserted that Chandra et al. fails to teach that the metal is in the form of clusters and fails to teach a hydrophilic polymer on the surface, but, according to the Examiner, Flick is one example of a disclosure of textile materials impregnated or coated with silver clusters. According to the Examiner, metal clusters would have been an obvious design choice. The Examiner also asserted that Madsen discloses a hydrophilic coating for medical devices including wound dressings, and that Becker et al. discloses that the thickness of the silver coating may vary broadly. This rejection is respectfully traversed.

As an initial matter, Applicants note that the status of claim 32 is unclear. While the Office Action Summary that accompanied the current Office Action indicates that all of the pending claims, including claim 32, are rejected, claim 32 is not included in the list of claims that are rejected under 35 U.S.C. §103. However, it appears that the Examiner's comments on page 6 regarding claim 29 are actually intended to be directed toward claim 32. Applicants respectfully request clarification with respect to claim 32.

The claimed wound dressing contains metal clusters that are covered with a hydrophilic polymer coating (on the first layer), which is further protected from the wound by a gas-permeable, liquid impermeable film (on the second layer) such that, when the wound dressing is adhered to skin, a liquid-tight inner space is formed over the wound into which a liquid can be deposited. None of the cited references disclose a wound dressing having the claimed components and configuration. The Examiner identified references that disclose a wound dressing that contains silver (i.e., Chandra et al. and Flick) having a “thickness that may vary broadly” (Becker et al.; column 4, lines 52-53) and a reference that discloses that medical devices including wound dressings can be coated with a hydrophilic polymer (i.e., Madsen), and asserted that the pending claims represent a combination of old elements. According to the Supreme Court, however, “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR International Co. v. Teleflex Inc. et al.*, 127 S. Ct. 1727, 1741 (2007).

Contrary to the Examiner's assertion, the claimed invention is not simply a wound dressing having metal clusters coated with a polymer. As explained below, the particular configuration of the claimed wound dressing (e.g., the metal clusters, the hydrophilic coating, and the gas permeable, liquid impermeable film) achieves optimal antimicrobial and hydrophilic behaviors within a layer that is not much thicker than the wavelength of light and with an amount of metal that is far less than the amounts disclosed in the cited references.

Pending claim 26 requires a) very low amounts of metal clusters (i.e., “a layer having a mean thickness of 5 to 100 nm”), b) chemical or physical binding of the metal clusters to the surface of the first layer, and c) a hydrophilic polymer coating over the metal clusters, which, in combination, prevents the release of metal clusters from the wound dressing. In addition, the claimed wound dressing provides a compartment between the wound dressing and the skin that can be filled with a suitable liquid to keep the wound wet and covered with fluid. These claimed features provide a number of advantages over the wound dressings disclosed in the cited references. For example, the metal clusters in the claimed wound dressing serve an anti-microbial purpose within the wound dressing, but do not leak out into the wound, which, it has been shown, can inhibit wound healing or induce an allergic response (see, for example, Innes et al., 2001, *Burns*, 6:621-7). Because the claimed wound dressing remains free of microorganisms

and can contain a suitable liquid to keep the wound moist, the claimed wound dressing can remain on the wound longer, which avoids unnecessary mechanical stress being placed on the wound. See, for example, page 5 of the present specification. The claimed wound dressing has unmatched surface and material properties.

On the other hand, the silver in the wound dressings described in the cited references is for antimicrobial purposes and, therefore, is not prohibited from leaving the wound dressing. For example, Chandra et al., Flick and Becker et al. do not disclose using a coating over the silver, and Madsen discloses using *water soluble* alkali metals, alkaline earth metals or silver for the purpose of being soluble in the wound. The Supreme Court and the Federal Circuit have repeatedly warned against the use of hindsight during an obviousness determination. For example, the Supreme Court stated that one performing an obviousness analysis must “guard against slipping into use of hindsight and to resist the temptation to read into the prior art the teachings of the invention in issue.” (*Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 36 (1966)). The claimed invention is to be considered as a whole, and not merely the sum of its parts. To ensure proper consideration of the claimed invention as a whole, “the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination.” *Ruiz v. A.B. Chance*, 357 F.3d 1270, 1275 (Fed. Cir. 2004). Since the Examiner has not identified any suggestion or motivation to make the claimed wound dressing having the particularly claimed combination of features, the Examiner has failed to satisfy the requirements under 35 U.S.C. §103.

For at least the reasons set forth herein, the claimed wound dressing is not obvious over any combination of the cited references. Accordingly, Applicants respectfully request that the rejection of claims 26-29, 31 and 34-59 under 35 U.S.C. §103(a) be withdrawn.

CONCLUSION

Applicants respectfully request that claims 26-29, 31, 32 and 34-59 be allowed. For the convenience of the Examiner, Applicants note that essentially these same claims were granted by the European Patent Office (EP 1 701 676 B1; copies of the granted claims are attached).

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Respectfully submitted,

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